8.4 MLLW Treatment as Reported by Sites

Treatment is defined as any method, technique, or process designed to change the physical or chemical character of waste to render it less hazardous; safer to transport, store or dispose; or reduce its volume.

MLLW treatment processes include such techniques as segregation of hazardous components, chemical stabilization (e.g., solidifying waste containing free liquid or particles), macroencapsulation (e.g., creating an impermeable block of waste by enveloping it with polyethylene), and incineration (e.g., oxidizing organic contaminants to produce a LLW product).

DOE sites treat MLLW both at DOE sites ("on-site") and, occasionally, at commercial facilities or other DOE sites ("off-site"). The treatment data in this chapter show the total amounts of MLLW treated both on- and off-site. No particular amount of MLLW reported in this chapter was (or is projected to be) treated both on-site and off-site in the same time period (which would appear as "double counting" in the data tables).

8.4.1 MLLW Treatment Data by Site and State

Tables 8-13 and 8-14 detail the total volumes of MLLW treated in FY 1998 and FY 1999 by site and by state, respectively. Figures 8-11 and 8-12 show the sites' relative contributions to the total volume of MLLW treated in FY 1998 and FY 1999.

Table 8-13
Total Volume of MLLW Treated as Reported by Sites: FY 1998 and FY 1999 Actuals
(Includes all physical forms except waste water)

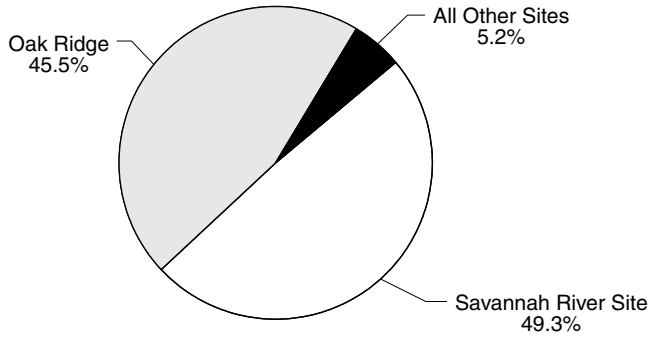
In cubic meters

State	Site	Site Code	FY 1998	% 1998 Total	FY 1999	% 1999 Total
CA	General Atomics	GEAT	0.03	<1	-	-
	Lawrence Berkeley National Laboratory[a]	LABL	1	<1	7	<1
	Lawrence Livermore National Laboratory - Main Site[a]	LLMS	55	<1	87	2.1
CO	Rocky Flats Environmental Technology Site	RFTS	-	-	-	-
IA	Ames Laboratory[a]	AMES	-	-	0.01	<1
ID	Idaho National Engineering and Environmental Laboratory[a]	INEEL	9	<1	831	20.0
IL	Argonne National Laboratory-East[a]	ANLE	38	<1	25	<1
KY	Paducah Gaseous Diffusion Plant[a]	PGDP	78	1.3	28	<1
NJ	Princeton Plasma Physics Laboratory	PPPL	2	<1	-	-
NM	Los Alamos National Laboratory[a]	LANL	25	<1	39	<1
	Sandia National Laboratories-NM[a]	SNLN	33	<1	4	<1
NV	Nevada Test Site[a]	NVTS	-	-	25	<1
NY	Brookhaven National Laboratory	BRNL	3	<1	15	<1
	West Valley Demonstration Project[a]	WVDP	0.7	<1	2	<1
OH	Miamisburg Environmental Management Project (Mound)[a]	MEMP	0.2	<1	24	<1
	Portsmouth Gaseous Diffusion Plant[a]	PORT	52	<1	14	<1
SC	Savannah River Site	SARS	3,016	49.3	509	12.2
TN	Oak Ridge Reservation	ORTN	2,782	45.5	2,512	60.4
TX	Pantex Plant[a]	PAPL	18	<1	22	<1
WA	Hanford Site[a]	HASI	-	-	18	<1
	Total		**6,112**	**100**	**4,160**	**100**

Notes:
• Hyphens indicate volumes of zero.
• Due to data rounding, the totals in this table may not equal the exact sum of the site-specific data.
• No amount of MLLW was treated both on-site and off-site in the same time period.

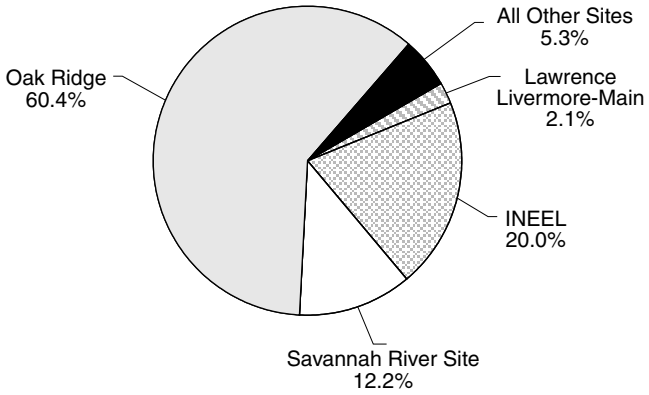
[a] These sites conducted off-site treatment for some or all of their MLLW.

Figure 8-11
Sites' Relative Contributions to the Volume of MLLW Treated as Reported by Sites: FY 1998 Actuals
(Includes all physical forms except waste water)



Note:
• The total reported volume (excluding waste water) of MLLW treated in FY 1998 was approximately 6,112 cubic meters. See Table 8-13 for further details.

Figure 8-12
Sites' Relative Contributions to the Volume of MLLW Treated as Reported by Sites: FY 1999 Actuals
(Includes all physical forms except waste water)



Note:
• The total reported volume (excluding waste water) of MLLW treated in FY 1999 was approximately 4,160 cubic meters. See Table 8-13 for further details.

Table 8-14
Total Volume of MLLW Treated by State
as Reported by Sites: FY 1998 and FY 1999 Actuals
(Includes all physical forms except waste water)

In cubic meters

State	FY 1998	% 1998 Total	FY 1999	% 1999 Total
California	56	<1	94	2.3
Idaho	9	<1	831	20.0
Illinois	38	<1	25	<1
Iowa	-	-	0.01	<1
Kentucky	78	1.3	28	<1
Nevada	-	-	25	<1
New Jersey	2	<1	-	-
New Mexico	58	<1	43	1.0
New York	4	<1	17	<1
Ohio	52	<1	38	<1
South Carolina	3,016	49.3	509	12.2
Tennessee	2,782	45.5	2,512	60.4
Texas	18	<1	22	<1
Washington	-	-	18	<1
Total	**6,112**	**100**	**4,160**	**100**

Notes:
• Hyphens indicate volumes of zero.
• Due to data rounding, the totals in this table may not equal the exact sum of the site-specific data.

***MLLW Treatment Site Projection Data**:*

A site summary of projected MLLW treatment volumes for FY 2000 - FY 2070 is provided in Table 8-15. Table 8-16 breaks the site projection data down by year or time period. Figure 8-13 shows the annual projected MLLW treatment volumes for FY 2000 - FY 2010, and Figure 8-14 shows the DOE-wide treatment projection totals for five-year time periods through FY 2070.

Table 8-15
Summary of Total Projected MLLW Treatment Volume
as Reported by Sites: FY 2000 - FY 2070
(Includes all physical forms except waste water)

In cubic meters

State	Site	Site Code	Total All Years	% Total	Last FY/Time Period Projected
CA	Lawrence Berkeley National Laboratory[a]	LABL	63	<1	2066-2070
	Lawrence Livermore National Laboratory - Main Site[a]	LLMS	5,342	8.1	2066-2070
CO	Rocky Flats Environmental Technology Site[a]	RFTS	319	<1	2002
IA	Ames Laboratory[a]	AMES	0.7	<1	2066-2070
ID	Idaho National Engineering and Environmental Laboratory[a]	INEEL	18,482	28.0	2031-2035
IL	Argonne National Laboratory-East[a]	ANLE	790	1.2	2066-2070
KY	Paducah Gaseous Diffusion Plant[a]	PGDP	944	1.4	2003
NJ	Princeton Plasma Physics Laboratory[a]	PPPL	142	<1	2066-2070
NM	Los Alamos National Laboratory[a]	LANL	15	<1	2003
	Sandia National Laboratories-NM[a]	SNLN	296	<1	2066-2070
NV	Nevada Test Site[a]	NVTS	0.3	<1	2001
	Brookhaven National Laboratory[a]	BRNL	403	<1	2066-2070
	West Valley Demonstration Project[a]	WVDP	155	<1	2011-2015
OH	Portsmouth Gaseous Diffusion Plant[a]	PORT	959	1.5	2003
SC	Savannah River Site[a]	SARS	4,593	7.0	2046-2050
TN	Oak Ridge Reservation	ORTN	8,935	13.5	2004
WA	Hanford Site[a]	HASI	24,621	37.3	2031-2035
	Total		**66,060**	**100**	

Notes:
• Due to data rounding, the totals in this table may not equal the exact sum of the site-specific data.
• No amount of MLLW was treated both on-site and off-site in the same time period.

[a] These sites expect to conduct off-site treatment for some or all of their MLLW.

Table 8-16. Total Projected MLLW Treatment Volume as Reported by Sites: FY 2000 - FY 2070
(Includes all physical forms except waste water)

In cubic meters

State	Site	Site Code	FY 2000[b]	FY 2001-2005	FY 2006-2010	FY 2011-2015	FY 2016-2020	FY 2021-2025
CA	Lawrence Berkeley National Laboratory[a]	LABL	0.2	8	6	6	6	6
	Lawrence Livermore National Laboratory - Main Site[a]	LLMS	84	570	428	355	355	355
CO	Rocky Flats Environmental Technology Site[a]	RFTS	122	197	-			
IA	Ames Laboratory[a]	AMES	0.01	0.05	0.05	0.05	0.05	0.05
ID	Idaho National Engineering and Environmental Laboratory[a]	INEEL	2,025	8,711	1,574	1,239	1,233	1,233
IL	Argonne National Laboratory-East[a]	ANLE	15	73	60	60	60	60
KY	Paducah Gaseous Diffusion Plant[a]	PGDP	115	384	445	-	-	-
NJ	Princeton Plasma Physics Laboratory[a]	PPPL	2	10	10	10	10	10
NM	Los Alamos National Laboratory[a]	LANL	4	11	-	-	-	-
	Sandia National Laboratories-NM[a]	SNLN	52	49	15	15	15	15
NV	Nevada Test Site[a]	NVTS	-	0.3	-	-	-	-
NY	Brookhaven National Laboratory[a]	BRNL	9	30	28	28	28	28
	West Valley Demonstration Project[a]	WVDP	4	150	-	0.8	-	-
OH	Portsmouth Gaseous Diffusion Plant[a]	PORT	199	760	-	-	-	-
SC	Savannah River Site[a]	SARS	21	1,170	469	516	745	721
TN	Oak Ridge Reservation	ORTN	2,903	6,032	-			
WA	Hanford Site[a]	HASI	1,060	5,692	4,686	4,252	4,188	2,308
	Total		**6,615**	**23,848**	**7,722**	**6,483**	**6,641**	**4,736**

State	Site	Site Code	FY 2026-2030	FY 2031-2035	FY 2036-2040	FY 2041-2045	FY 2046-2050	FY 2051-2055
CA	Lawrence Berkeley National Laboratory[a]	LABL	6	7	2	2	2	2
	Lawrence Livermore National Laboratory - Main Site[a]	LLMS	355	355	355	355	355	355
CO	Rocky Flats Environmental Technology Site[a]	RFTS	-	-	-	-	-	-
IA	Ames Laboratory[a]	AMES	0.05	0.05	0.05	0.05	0.05	0.05
ID	Idaho National Engineering and Environmental Laboratory[a]	INEEL	1,233	1,233	-	-	-	-
IL	Argonne National Laboratory-East[a]	ANLE	60	60	60	60	44	44
KY	Paducah Gaseous Diffusion Plant[a]	PGDP	-	-	-	-	-	-
NJ	Princeton Plasma Physics Laboratory[a]	PPPL	10	10	10	10	10	10
NM	Los Alamos National Laboratory[a]	LANL	-	-	-	-	-	-
	Sandia National Laboratories-NM[a]	SNLN	15	15	15	15	15	15
NV	Nevada Test Site[a]	NVTS	-	-	-	-	-	-
NY	Brookhaven National Laboratory[a]	BRNL	28	28	28	28	28	28
	West Valley Demonstration Project[a]	WVDP	-	-	-	-	-	-
OH	Portsmouth Gaseous Diffusion Plant[a]	PORT	-	-	-	-	-	-
SC	Savannah River Site[a]	SARS	729	213	3	4	3	
TN	Oak Ridge Reservation	ORTN	-	-	-	-	-	-
WA	Hanford Site[a]	HASI	1,849	585	-	-	-	-
	Total		**4,286**	**2,506**	**473**	**474**	**457**	**454**

Notes:
• Hyphens indicate volumes of zero.
• Due to data rounding, the totals in this table may not equal the exact sum of the site-specific data.
• No amount of MLLW was treated both on-site and off-site in the same time period.

[a] These sites expect to conduct off-site treatment for some or all of their MLLW.
[b] These annual data reflect the total volume projected by sites for FY 2000. All post-FY 2000 data reflect the total summary volume projected for the specific five-year time period.

(continued…)

Table 8-16 (cont'd)
Total Projected MLLW Treatment Volume as Reported by Sites:
FY 2000 - FY 2070
(Includes all physical forms except waste water)

In cubic meters

State	Site	Site Code	FY 2056-2060	FY 2061-2065	FY 2066-2070	Site Total
CA	Lawrence Berkeley National Laboratory[a]	LABL	2	2	2	**63**
	Lawrence Livermore National Laboratory - Main Site[a]	LLMS	355	355	355	**5,342**
CO	Rocky Flats Environmental Technology Site[a]	RFTS	-	-	-	**319**
IA	Ames Laboratory[a]	AMES	0.05	0.05	0.05	**0.7**
ID	Idaho National Engineering and Environmental Laboratory[a]	INEEL	-	-	-	**18,482**
IL	Argonne National Laboratory-East[a]	ANLE	44	44	44	**790**
KY	Paducah Gaseous Diffusion Plant[a]	PGDP	-	-	-	**944**
NJ	Princeton Plasma Physics Laboratory[a]	PPPL	10	10	10	**142**
NM	Los Alamos National Laboratory[a]	LANL	-	-	-	**15**
	Sandia National Laboratories-NM[a]	SNLN	15	15	15	**296**
NV	Nevada Test Site[a]	NVTS	-	-	-	**0.3**
NY	Brookhaven National Laboratory[a]	BRNL	28	28	28	**403**
	West Valley Demonstration Project[a]	WVDP	-	-	-	**155**
OH	Portsmouth Gaseous Diffusion Plant[a]	PORT	-	-	-	**959**
SC	Savannah River Site[a]	SARS	-	-	-	**4,593**
TN	Oak Ridge Reservation	ORTN	-	-	-	**8,395**
WA	Hanford Site[a]	HASI	-	-	-	**24,621**
	Total		**454**	**454**	**454**	**66,060**

Notes:
• Hyphens indicate volumes of zero.
• Due to data rounding, the totals in this table may not equal the exact sum of the site-specific data.
• No amount of MLLW was treated both on-site and off-site in the same time period.
• Post-FY 2000 data reflect the total summary volumes projected for each specified five-year time period.

[a] These sites expect to conduct off-site treatment for some or all of their MLLW.

Figure 8-13
Total Projected Volume of MLLW Treatment as Reported by Sites:
FY 2000 - FY 2010
(Includes all physical forms except waste water)

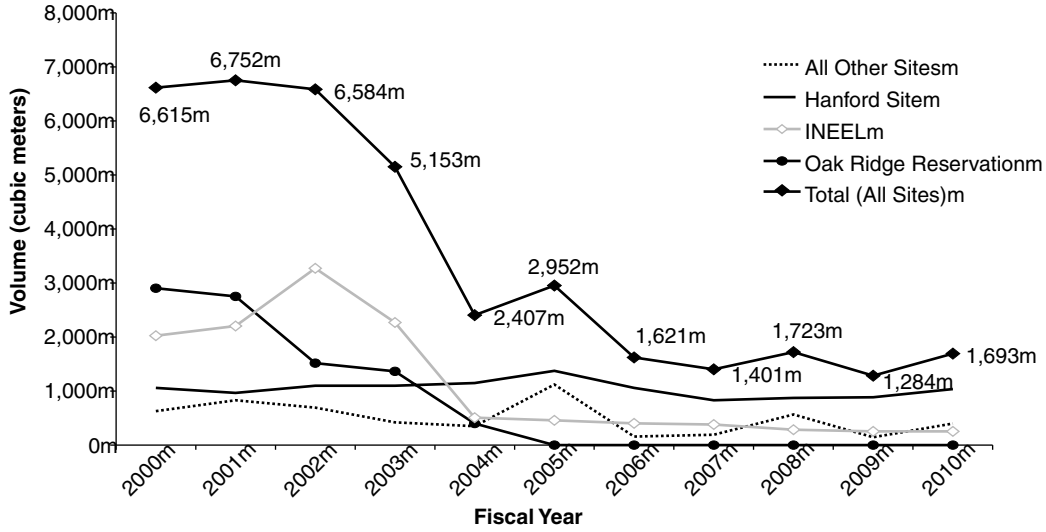
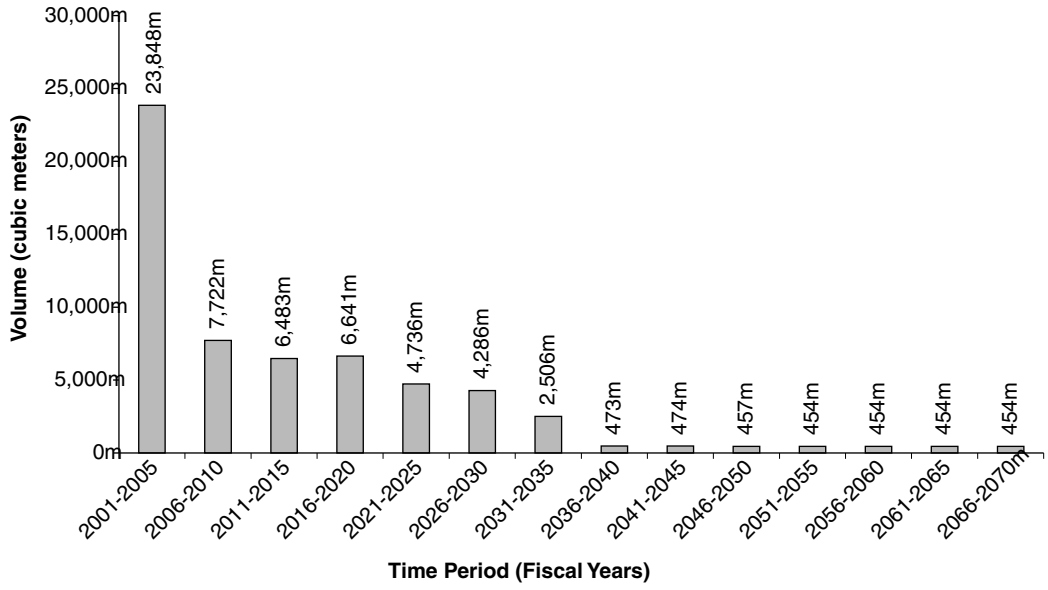


Figure 8-14
Total Projected Volume of MLLW Treatment as Reported by Sites:
FY 2001- FY 2070
(Includes all physical forms except waste water)



8.5 MLLW Receipts as Reported by Sites

Receipts are defined as the quantity of MLLW a site receives from another site. The "shipping site" is the site that will be sending MLLW to a DOE or commercial site in the specified year or range of years. The "receiving site" is the site that will be receiving the MLLW from one of these "shipping sites" in the specified year or range of years.

8.5.1 MLLW Receipts Data by Site and State

The following *summary* data in Table 8-17 report the volume of MLLW receipts for FY 1998 and FY 1999. MLLW receipts by state in FY 1998 and FY 1999 are shown in Table 8-18. Table 8-19 contains more detailed data on receipts for FY 1998 and FY 1999, showing receipts from each shipping site.

Table 8-17
Summary of Total MLLW Receipts Volume as Reported by Sites:
FY 1998 and FY 1999 Actuals
(Includes all physical forms except waste water)

In cubic meters

State	Site	Site Code	FY 1998	% 1998 Total	FY 1999	% 1999 Total
ID	Idaho National Engineering and Environmental Laboratory	INEEL	51	1.3	60	<1
NV	Nevada Test Site	NVTS	-	-	13	<1
TN	Diversified Scientific Services, Inc.	DSSI	25	<1	32	<1
	GTS Duratek	SEG	7	<1	2	<1
	Nuclear Fuel Services	NFS	0.2	<1	-	-
	Oak Ridge Reservation	ORTN	89	2.3	171	1.0
	U.S. Ecology	ECTN	-	-	220	1.3
TX	Nuclear Sources and Services, Inc.	NSSI	0.1	<1	-	-
UT	Envirocare	ENVR	3,665	94.3	15,980	96.4
WA	Hanford Site	HASI	-	-	2	<1
NA	East TN Materials & Energy/Waste Control Specialists[a]	MEWC	-	-	6	<1
NA	Waste Control Specialists[a]	WCS	0.2	<1	50	<1
n/a	Unspecified[b]	n/a	47	1.2	39	<1
	Total		**3,885**	**100**	**16,576**	**100**

Notes:
• Hyphens indicate volumes of zero.
• Due to data rounding, the totals in this table may not equal the exact sum of the site-specific data.
• NA=not available.
• n/a=not applicable.

[a]Waste Control Specialists has locations in NM, TN, and TX.
[b]Includes unspecified DOE and commercial sites

Table 8-18
Summary of Total MLLW Receipts Volume by State as Reported by Sites:
FY 1998 and FY 1999 Actuals
(Includes all physical forms except waste water)

In cubic meters

State	FY 1998	% 1998 Total	FY 1999	% 1999 Total
Idaho	51	1.3	60	<1
Nevada	-	-	13	<1
Tennessee	121	3.1	425	2.6
Texas	0.1	<1	-	-
Utah	3,665	94.3	15,980	96.4
Washington	-	-	2	<1
NA	0.2	<1	56	<1
n/a	47	1.2	39	<1
Total	**3,885**	**100**	**16,576**	**100**

Notes:
• Hyphens indicate volumes of zero.
• Due to data rounding, the totals in this table may not equal the exact sum of the site-specific data.
• NA = not available
• n/a = not applicable

Table 8-19
Total Volume of MLLW Receipts as Reported by Sites: FY 1998 and FY 1999 Actuals
(Includes all physical forms except waste water)

In cubic meters

RECEIVING SITE: Idaho National Environmental Engineering Laboratory (INEEL) (State: ID)

State	Shipping Site	Site Code	FY 1998	FY 1999
CA	Lawrence Berkeley National Laboratory	LABL	-	5
CT	Knolls Atomic Power Laboratory-Windsor	KWIN	-	2
HI	Pearl Harbor Naval Shipyard	PHNS	0.1	0.1
ID	Argonne National Laboratory-West	ANLW	-	2
	Naval Reactor Facility	NRF	-	9
IL	Argonne National Laboratory-East	ANLE	-	2
KY	Paducah Gaseous Diffusion Plant	PGDP	8	-
ME	Portsmouth Naval Shipyard	PNS	-	0.01
MO	Missouri University Research Reactor	MURR	-	0.7
NM	Sandia National Laboratories-NM	SNLN	19	-
NY	Knolls Atomic Power Laboratory-Kesselring	KESS	0.03	0.6
	Knolls Atomic Power Laboratory-Schenectady	KAPL	0.2	0.7
	Rensselaer Polytechnic Institute	RPI	-	1
PA	Bettis Atomic Power Laboratory	BAPL	0.4	0.2
TX	Pantex Plant	PAPL	18	21
VA	Norfolk Naval Shipyard	NNS	3	-
WA	Hanford Site	HASI	-	16
	Puget Sound Naval Shipyard	PSNS	3	-
	INEEL Total		**51**	**60**
	INEEL's contribution to DOE total:		***1.3%***	***<1%***

RECEIVING SITE: Nevada Test Site (State: NV)

State	Shipping Site	Site Code	FY 1998	FY 1999
NA	Waste Control Specialists[a]	WCS	-	13
	Nevada Test Site Total		**0**	**13**
	Nevada Test Site's contribution to DOE total:		***-***	***<1%***

RECEIVING SITE: Diversified Scientific Services, Inc. (DSSI) (State: TN)

State	Shipping Site	Site Code	FY 1998	FY 1999
CA	Lawrence Livermore National Laboratory-Main Site	LLMS		9
IA	Ames Laboratory	AMES	-	0.01
NM	Los Alamos National Laboratory	LANL	24	21
	Sandia National Laboratories-NM	SNLN	1	2
NY	West Valley Demonstration Project	WVDP	0.2	0.2
	DSSI Total		**25**	**32**
	DSSI's contribution to DOE total:		***<1%***	***<1%***

RECEIVING SITE: GTS Duratek (State: TN)

State	Shipping Site	Site Code	FY 1998	FY 1999
IL	Argonne National Laboratory-East	ANLE	7	2
	GTS Duratek Total		**7**	**2**
	GTS Duratek's contribution to DOE total:		***<1%***	***<1%***

Notes:
• Hyphens indicate volumes of zero.
• Due to data rounding, the totals in this table may not equal the exact sum of the site-specific data.
• NA=not available.
[a] Waste Control Specialists has locations in NM, TN, and TX.

Table 8-19 (cont'd)
Total Volume of MLLW Receipts as Reported by Sites: FY 1998 and FY 1999 Actuals
(Includes all physical forms except waste water)

In cubic meters

RECEIVING SITE: Nuclear Fuel Services, Inc. (State: TN)

State	Shipping Site	Site Code	FY 1998	FY 1999
CA	General Atomics	GEAT	0.2	-
	Nuclear Fuel Services, Inc. Total		**0.2**	**0**
	Nuclear Fuel Services' contribution to DOE total:		***<1%***	**-**

RECEIVING SITE: Oak Ridge Reservation (State: TN)

State	Shipping Site	Site Code	FY 1998	FY 1999
KY	Paducah Gaseous Diffusion Plant	PGDP	38	25
OH	Fernald Environmental Management Project	FEMP	-	132
	Portsmouth Gaseous Diffusion Plant	PORT	51	14
	Oak Ridge Total		**89**	**171**
	Oak Ridge's contribution to DOE total:		***2.3%***	***1.0%***

RECEIVING SITE: U.S. Ecology (State: TN)

State	Shipping Site	Site Code	FY 1998	FY 1999
TN	Oak Ridge Reservation	ORTN	-	**220**
	U.S. Ecology Total		**0**	**220**
	U.S. Ecology's contribution to DOE total:		**-**	***1.3%***

RECEIVING SITE: Nuclear Sources and Services, Inc. (State: TX)

State	Shipping Site	Site Code	FY 1998	FY 1999
OH	Miamisburg Environmental Management Project (Mound)	MEMP	0.1	-
	Nuclear Sources and Services, Inc. Total		**0.1**	**0**
	Nuclear Sources and Services' contribution to DOE total:		***<1%***	**-**

RECEIVING SITE: Envirocare (State: UT)

State	Shipping Site	Site Code	FY 1998	FY 1999
CA	General Atomics	GEAT	0.5	14
	Lawrence Berkeley National Laboratory	LABL	-	4
	Lawrence Livermore National Laboratory-Main Site	LLMS	-	12
CO	Rocky Flats Environmental Technology Center	RFTS	-	7,968
ID	Idaho National Engineering and Environmental Laboratory	INEEL	4	168
ID	Argonne National Laboratory-West	ANLW	-	16
IL	Argonne National Laboratory-East	ANLE	-	1
KY	Paducah Gaseous Diffusion Plant	PGDP	28	8
NM	Los Alamos National Laboratory	LANL	23	12
	Sandia National Laboratories-NM	SNLN	1	12
NY	Brookhaven National Laboratory	BRNL	3	13.61
OH	Portsmouth Gaseous Diffusion Plant	PORT	254	1,217
TN	Oak Ridge Reservation	ORTN	3,352	6,523
TX	Pantex Plant	PAPL	-	12
	Envirocare Total		**3,665**	**15,980**
	Envirocare's contribution to DOE total:		***94.3%***	***96.4%***

Notes:
• Hyphens indicate volumes of zero.
• Due to data rounding, the totals in this table may not equal the exact sum of the site-specific data.

(continued…)

Table 8-19 (cont'd)
Total Volume of MLLW Receipts as Reported by Sites: FY 1998 and FY 1999 Actuals
(Includes all physical forms except waste water)

In cubic meters

RECEIVING SITE: Hanford (State: WA)

State	Shipping Site	Site Code	FY 1998	FY 1999
NY	Knolls Atomic Power Laboratory-Schenectady	KAPL	-	0.4
WA	Puget Sound Naval Shipyard	PSNS	-	2
	Hanford Total		**0**	**2**
	Hanford's contribution to DOE total:		**-**	***<1%***

RECEIVING SITE: East TN Materials & Energy/Waste Control Spec. (MEWC) (State: NA)[b]

State	Shipping Site	Site Code	FY 1998	FY 1999
KY	Paducah Gaseous Diffusion Plant	PGDP	-	6
	MEWC Total		**0**	**6**
	MEWC's contribution to DOE total:		**-**	***<1%***

RECEIVING SITE: Waste Control Specialists (State: NA)[a]

State	Shipping Site	Site Code	FY 1998	FY 1999
NV	Nevada Test Site	NVTS	-	25
OH	Miamisburg Environmental Management Project (Mound)	MEMP	0.2	24
TX	Pantex Plant	PAPL	-	1
	Waste Control Specialists Total		**0.2**	**50**
	Waste Control Specialists' contribution to DOE total:		***<1%***	***<1%***

RECEIVING SITE: Unspecified[b] (State: n/a)

State	Shipping Site	Site Code	FY 1998	FY 1999
ID	Idaho National Engineering and Environmental Laboratory	INEEL	-	0.4
NM	Los Alamos National Laboratory	LANL	47	35
NY	West Valley Demonstration Project	WVDP	-	0.05
WA	Hanford Site	HASI	-	4
	Unspecified Total		**47**	**39**
	Unspecified sites' contribution to DOE total:		***1.2%***	***<1%***

Total-All DOE Sites

State	Shipping Site	Site Code	FY 1998	FY 1999
	All DOE Sites Total		**3,885**	**16,576**

Notes:
• Hyphens indicate volumes of zero.
• Due to data rounding, the totals in this table may not equal the exact sum of the site-specific data.
• NA=not available.
• n/a=not applicable.

[a]Waste Control Specialists has locations in NM, TN, and TX.
[b]Includes unspecified DOE and commercial sites.

MLLW Receipts Site Projection Data:

Table 8-20 provides receipts projection data. Detailed projections that include shipping site data are shown in Table 8-21. Figure 8-15 shows projected MLLW annual receipts by site for FY 2000 through FY 2010, and Figure 8-16 presents DOE-wide projection totals for five-year time periods through FY 2070.

Table 8-20
Summary of Total Projected MLLW Receipts Volume as Reported by Sites: FY 2000 - FY 2070
(Includes all physical forms except waste water)

In cubic meters

State	Receiving Site	Site Code	FY 2000[a]	FY 2001-2005	FY 2006-2010	FY 2011-2015	FY 2016-2020	FY 2021-2025
ID	Idaho National Engineering and Environmental Laboratory	INEEL	94	717	155	35	34	34
TN	Oak Ridge Reservation	ORTN	690	1,242	-	-	-	-
WA	Hanford Site	HASI	17	182	-	-	-	-
n/a	To be Determined[b]	n/a	11,530	43,987	30,697	4,882	4,799	4,516
	Total		**12,332**	**46,128**	**30,852**	**4,917**	**4,833**	**4,550**

State	Receiving Site	Site Code	FY 2026-2030	FY 2031-2035	FY 2036-2040	FY 2041-2045	FY 2046-2050	FY 2051-2055
ID	Idaho National Engineering and Environmental Laboratory	INEEL	34	34	-	-	-	-
TN	Oak Ridge Reservation	ORTN	-	-	-	-	-	-
WA	Hanford Site	HASI	-	-	-	-	-	-
n/a	To be Determined[b]	n/a	4,273	4,014	2,861	2,857	2,857	2,853
	Total		**4,306**	**4,048**	**2,861**	**2,857**	**2,857**	**2,853**

State	Receiving Site	Site Code	FY 2056-2060	FY 2061-2065	FY 2066-2070	Non-Annualized[c]	Site Total	% Total
ID	Idaho National Engineering and Environmental Laboratory	INEEL	-	-	-	-	**1,136**	<1
TN	Oak Ridge Reservation	ORTN	-	-	-	-	**1,932**	1.4
WA	Hanford Site	HASI	-	-	-	-	**199**	<1
n/a	To be Determined[b]	n/a	2,850	2,850	2,851	2,125	**130,803**	97.6
	Total		**2,850**	**2,850**	**2,851**	**2,125**	**134,070**	**100**

Notes:
• Hyphens indicate volumes of zero.
• Due to data rounding, the totals in this table may not equal the exact sum of the site-specific data.

[a]These annual data reflect the total volume projected by sites for FY 2000. All data reported for the post-2000 time periods reflect the total summary volume projected for the specific five-year time period.
[b]Includes undetermined DOE and commercial sites.
[c]Non-annualized refers to those volumes of MLLW for which the DOE could not specify the year in which the receipt would occur.

Table 8-21
Total Projected Volume of MLLW Receipts as Reported by Sites: FY 2000 - FY 2070

Note: Due to its length, this table spans pages 8-37 - 8-41. Data are shown one site at a time.

In cubic meters

RECEIVING SITE: Idaho National Environmental Engineering Laboratory (INEEL)[a] (State:ID)

State	Shipping Site	Site Code	FY 2000[b]	FY 2001[b]	FY 2002[b]	FY 2003[b]	FY 2004[b]	FY 2005[b]	FY 2006[b]	FY 2007[b]	FY 2008[b]	FY 2009[b]	FY 2010[b]	FY 2011-2015	FY 2016-2020	FY 2021-2025	FY 2026-2030	FY 2031-2035	Site Total
CA	Lawrence Berkeley National Laboratory	LABL	-	1	-	-	3	1	1	1	1	1	1	4	4	4	4	4	**30**
	Lawrence Livermore National Laboratory-Main Site	LLMS	-	-	-	-	110	109	57	24	5	5	5	25	25	25	25	25	**440**
	Mare Island Naval Shipyard	MINS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**0**
CO	Rocky Flats Technology Site	RFTS	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**22**
CT	Knolls Atomic Power Laboratory-Windsor	KWIN	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**0**
HI	Pearl Harbor Naval Shipyard	PHNS	0.1	0.1	0.1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	**1**
ID	Argonne National Laboratory-West	ANLW	3	3	3	2	2	2	2	2	2	2	2	5	5	5	5	5	**50**
	Naval Reactor Facility	NAVY	24	16	16	20	-	-	-	-	-	-	-	-	-	-	-	-	**75**
IL	Argonne National Laboratory-East	ANLE	2	2	2	2	-	-	-	-	-	-	-	-	-	-	-	-	**10**
KY	Paducah Gaseous Diffusion Plant	PGDP	18	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**42**
ME	Portsmouth Naval Shipyard	PNS	0.01	0.01	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	**0**
MO	Missouri University Research Reactor	MURR	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	**3**
NM	Sandia National Laboratories-NM	SNLN	16																**16**
NY	Knolls Atomic Power Laboratory-Kesselring	KESS	1	1	1	8	7	7	7	7	-	-	-	-	-	-	-	-	**38**
	Knolls Atomic Power Laboratory-Schenectady	KAPL	1	1	1	8	7	7	7	7	-	-	-	-	-	-	-	-	**38**
	Rensselaer Polytechnic Institute	RPI	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	**4**
	West Valley Demonstration Project	WVDP	-	11	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	**12**
OH	Portsmouth Gaseous Diffusion Plant	PORT	-	-	150	-	-	-	-	11	-	-	-	-	-	-	-	-	**161**
PA	Bettis Atomic Power Laboratory	BAPL	1	0.4	0.4	18	-	-	-	-	-	-	-	-	-	-	-	-	**19**
VA	Norfolk Naval Shipyard	NNS	3	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	**6**
WA	Hanford Site	HASI	-	50	50	50	-	-	-	-	-	-	-	-	-	-	-	-	**150**
	Puget Sound Naval Shipyard	PSNS	2	1	1	4	3	3	3	3	-	-	-	-	-	-	-	-	**19**
	INEEL Total		**94**	**114**	**228**	**114**	**132**	**129**	**77**	**55**	**8**	**8**	**8**	**35**	**34**	**34**	**34**	**34**	**1,136**
																		INEEL's contribution to DOE total:	**<1%**

Notes:
• Hyphens indicate volumes of zero.
• Due to data rounding, the totals in this table may not equal the exact sum of the site-specific data.

[a] There are no projected receipts to INEEL after FY 2035.

[b] These annual data reflect the total volume projected by sites for FY 2000 - FY 2010. All post-FY 2010 data reflect the total volume projected for the specified five-year time periods.

(continued…)

Table 8-21 (cont'd)
Total Projected Volume of MLLW Receipts as Reported by Sites: FY 2000 - FY 2070[a]

In cubic meters

RECEIVING SITE: Oak Ridge Reservation (State: TN)

State	Site	Site Code	FY 2000	FY 2001	FY 2002	FY 2003	Site Total
CO	Rocky Flats Technology Site	RFTS	100	49	148	-	**297**
ID	Idaho National Engineering and Environmental Laboratory	INEEL	-	3	-	-	**3**
IL	Argonne National Laboratory-East	ANLE	71	-	-	-	**71**
KY	Paducah Gaseous Diffusion Plant	PGDP	66	132	100	102	**400**
NV	Nevada Test Site	NVTS	-	0	-	-	**0**
NY	West Valley Demonstration Project	WVDP	-	0	-	-	**0**
OH	Fernald Environmental Management Project	FEMP	253	261	-	-	**514**
	Portsmouth Gaseous Diffusion Plant	PORT	199	151	151	144	**645**
SC	Savannah River Site	SARS	1	1	-	-	**2**
	Oak Ridge Reservation Total		**690**	**597**	**399**	**246**	**1,932**
						Oak Ridge Reservation's contribution to DOE total:	**1.4%**

RECEIVING SITE: Hanford (State: WA)

State	Shipping Site	Site Code	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Site Total
HI	Pearl Harbor Naval Shipyard	PHNS	-	7	-	-	-	-	**7**
ID	Naval Reactor Facility	NAVY	16	50	50	50	-	-	**166**
ME	Portsmouth Naval Shipyard	PORT	1	-	-	-	-	-	**1**
NY	Knolls Atomic Power Laboratory-Schenectady	KAPL	0	7	2	2	2	2	**15**
OH	Columbus Environmental Management Project	CEMP	-	-	-	-	6	-	**6**
PA	Bettis Atomic Power Laboratory	BAPL	-	1	-	-	-	-	**1**
WA	Puget Sound Naval Shipyard	PSNS	-	-	3	-	-	-	**3**
	Hanford Total		**17**	**65**	**55**	**52**	**8**	**2**	**199**
							Hanford's contribution to DOE total:		**<1%**

Notes:
- Hyphens indicate volumes of zero.
- Due to data rounding, the totals in this table may not equal the exact sum of the site-specific data.
- These annual data reflect the total volume projected by sites for each year.

[a] There are no projected MLLW receipts to Oak Ridge Reservation after FY 2003 or to Hanford after FY 2005.

(continued…)

Table 8-21 (cont'd)
Total Projected Volume of MLLW Receipts as Reported by Sites:
FY 2000 - FY 2070

In cubic meters

RECEIVING SITE: To Be Determined[b] (State: n/a)

State	Shipping Site	Site Code	FY 2000[a]	FY 2001[a]	FY 2002[a]	FY 2003[a]	FY 2004[a]	FY 2005[a]	FY 2006[a]	FY 2007[a]	FY 2008[a]	FY 2009[a]	FY 2010[a]
CA	General Atomics	GEAT	1	-	-	-	-	-	-	-	-	-	-
	Laboratory for Energy Related Health Research	LEHR	0.4	-	1	-	-	-	-	-	-	-	-
	Lawrence Berkeley National Laboratory	LABL	0.4	2	1	2	2	1	1	1	1	1	1
	Lawrence Livermore National Laboratory-Main Site	LLMS	42	25	25	51	-	-	-	-	-	-	-
CO	Rocky Flats Technology Site	RFTS	2,564	1,098	2,119	1,258	2,368	6,525	22,346	-	-	-	-
IA	Ames Laboratory	AMES	1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
ID	Argonne National Laboratory-West	ANLW	3	-	-	-	-	-	-	-	-	-	-
	Idaho National Engineering and Environmental Laboratory	INEEL	442	341	411	316	189	189	189	189	189	160	159
IL	Argonne National Laboratory-East	ANLE	94	25	32	15	11	9	9	9	9	9	9
KY	Paducah Gaseous Diffusion Plant	PGDP	48	428	488	505	451	1,125	1,011	104	54	449	29
NJ	Princeton Plasma Physics Laboratory	PPPL	-	0.2	-	-	-	-	-	-	-	-	-
NM	Los Alamos National Laboratory	LANL	71	43	78	121	36	2	2	2	-	-	-
	Lovelace Respiratory Research Institute	LRRI	1	1	1	1	1	1	1	1	1	1	1
	Sandia National Laboratory-NM	SNLN	57	46	17	14	14	14	14	14	14	14	14
NV	Nevada Test Site	NVTS	0.04	-	-	-	-	-	-	-	-	-	-
NY	Brookhaven National Laboratory	BRNL	8	5	5	5	5	5	5	5	5	5	5
	West Valley Demonstration Project	WVDP	4	131	1	1	2	-	-	-	-	-	-
OH	Miamisburg Environmental Management Program (Mound)	MEMP	0.2	-	-	-	-	-	-	-	-	-	-
	Portsmouth Gaseous Diffusion Plant	PORT	112	230	1,990	2,961	2,067	1,832	1,151	-	-	-	-
SC	Savannah River Site	SARS	50	222	226	364	497	492	413	114	67	2	54
TN	Oak Ridge Reservation	ORTN	6,971	3,956	3,794	1,565	1,397	535	535	535	535	535	535
WA	Hanford Site	HASI	1,060	883	605	602	608	602	310	269	196	206	210
	To Be Determined Total		**11,530**	**7,437**	**9,792**	**7,780**	**7,648**	**11,331**	**25,987**	**1,242**	**1,070**	**1,382**	**1,017**

Notes:
• Hyphens indicate volumes of zero.
• Due to data rounding, the totals in this table may not equal the exact sum of the site-specific data.

[a] These annual data reflect the total volume projected by sites for FY 2000 - FY 2010.
[b] Includes unspecified DOE and commercial sites.

(continued…)

Table 8-21 (cont'd). Total Projected Volume of MLLW Receipts as Reported by Sites: FY 2000 - FY 2070[b]

In cubic meters

RECEIVING SITE: To Be Determined (State: n/a)

State	Shipping Site	Site Code	FY 2011-2015[a]	FY 2016-2020[a]	FY 2021-2025[a]	FY 2026-2030[a]	FY 2031-2035[a]	FY 2036-2040[a]	FY 2041-2045[a]	FY 2046-2050[a]	FY 2051-2055[a]	FY 2056-2060[a]	FY 2061-2065	FY 2066-2070[a]	Non-Annualized[c]	Site Total
CA	General Atomics	GEAT	-	-	-	-	-	-	-	-	-	-	-	-	-	**1**
	Laboratory for Energy Related Health Research	LEHR	-	-	-	-	-	-	-	-	-	-	-	-	-	**1**
	Lawrence Berkeley National Laboratory	LABL	7	7	7	7	7	11	11	11	11	11	11	11	0.1	**124**
	Lawrence Livermore National Laboratory-Main Site	LLMS	-	-	-	-	-	25	25	25	25	25	25	25	-	**318**
CO	Rocky Flats Technology Site	RFTS	-	-	-	-	-	-	-	-	-	-	-	-	-	**38,278**
IA	Ames Laboratory	AMES	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	-	**1**
ID	Argonne National Laboratory-West	ANLW	-	-	-	-	-	-	-	-	-	-	-	-	-	**3**
	Idaho National Engineering and Environmental Laboratory	INEEL	737	726	726	726	726	-	-	-	-	-	-	-	-	**6,414**
IL	Argonne National Laboratory-East	ANLE	44	44	44	44	44	44	44	44	44	44	44	44	-	**758**
KY	Paducah Gaseous Diffusion Plant	PGDP	145	145	145	-	-	-	-	-	-	-	-	-	-	**5,127**
NJ	Princeton Plasma Physics Laboratory	PPPL	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.2**
NM	Los Alamos National Laboratory	LANL	-	-	-	-	-	-	-	-	-	-	-	-	2,123	**2,477**
	Lovelace Respiratory Research Institute	LRRI	5	5	5	5	5	5	5	5	5	5	5	5		**71**
	Sandia National Laboratory-NM	SNLN	66	66	66	66	66	66	66	66	66	66	66	66	-	**1,023**
NV	Nevada Test Site	NVTS	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.04**
NY	Brookhaven National Laboratory	BRNL	25	25	25	25	25	25	25	25	25	25	25	25	-	**358**
	West Valley Demonstration Project	WVDP	1	-	-	-	-	-	-	-	-	-	-	-	-	**140**
OH	Miamisburg Environmental Management Program (Mound)	MEMP	-	-	-	-	-	-	-	-	-	-	-	-		**0.2**
	Portsmouth Gaseous Diffusion Plant	PORT	-	-	-	-	-	-	-	-	-	-	-	-	-	**10,344**
SC	Savannah River Site	SARS	335	301	303	329	299	10	6	6	3	-	-	-	-	**4,092**
TN	Oak Ridge Reservation	ORTN	2,675	2,675	2,675	2,675	2,675	2,675	2,675	2,675	2,675	2,675	2,675	2,675		**52,986**
WA	Hanford Site	HASI	843	806	521	397	168	-	-	-	-	-			1	**8,286**
	To Be Determined Total		**4,882**	**4,799**	**4,516**	**4,273**	**4,014**	**2,861**	**2,857**	**2,857**	**2,853**	**2,850**	**2,850**	**2,851**	**2,125**	**130,803**
															To Be Determined Sites' contribution to DOE total:	**97.6%**

Notes:
• Hyphens indicate volumes of zero.
• Due to data rounding, the totals in this table may not equal the exact sum of the site-specific data.

[a] All post-FY 2010 data reflect the total volume projected for the specified five-year time periods.
[b] Includes unspecified DOE and commercial sites.
[c] Non-annualized refers to those volumes of MLLW for which the DOE could not specify the year in which the receipt would occur.

(continued…)

Table 8-21 (cont'd)
Total Projected Volume of MLLW Receipts as Reported by Sites:
FY 2000 - FY 2070

In cubic meters

TOTAL (All Receiving Sites)

FY 2000[a]	FY 2001[a]	FY 2002[a]	FY 2003[a]	FY 2004[a]	FY 2005[a]	FY 2006[a]	FY 2007[a]
12,332	8,213	10,474	8,191	7,788	11,461	26,063	1,297

FY 2008[a]	FY 2009[a]	FY 2010[a]	FY 2011-2015	FY 2016-2020	FY 2021-2025	FY 2026-2030	FY 2031-2035
1,078	1,390	1,024	4,917	4,833	4,550	4,306	4,048

FY 2036-240	FY 2041-2045	FY 2046-2050	FY 2051-2055	FY 2056-2060	FY 2061-2065	FY 2066-2070	Non-Annualized[b]	DOE Total
2,861	2,857	2,857	2,853	2,850	2,850	2,851	**2,125**	**134,070**

Notes:
[a] These annual data reflect the total volume projected by sites for FY 2000 - FY 2010. All post-FY 2010 data reflect the total volume projected for the specified five-year time periods.
[b] Non-annualized refers to those volumes of MLLW for which the DOE could not specify the year in which the receipt would occur.

Figure 8-15
Total Projected Volume of MLLW Receipts
as Reported by Sites: FY 2000 - FY 2010
(Includes all physical forms except waste water)

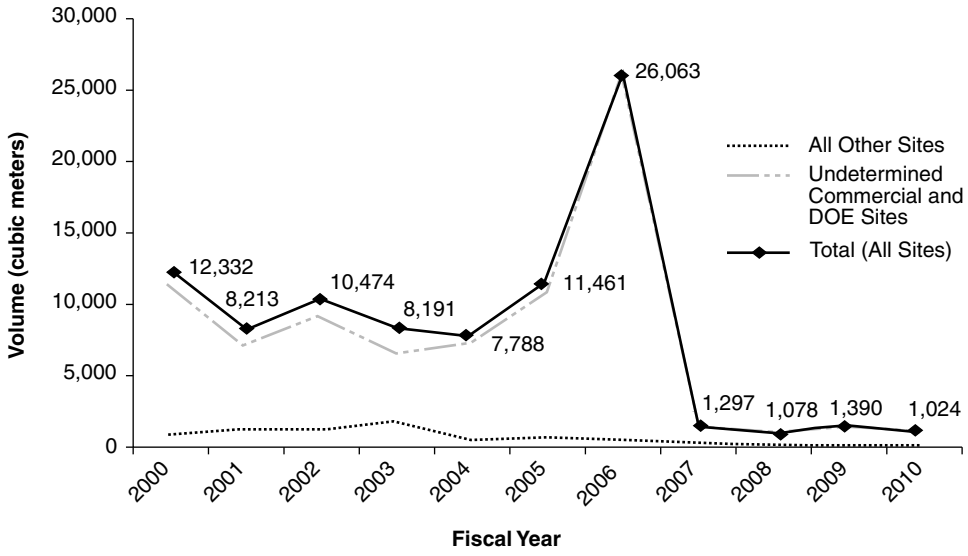
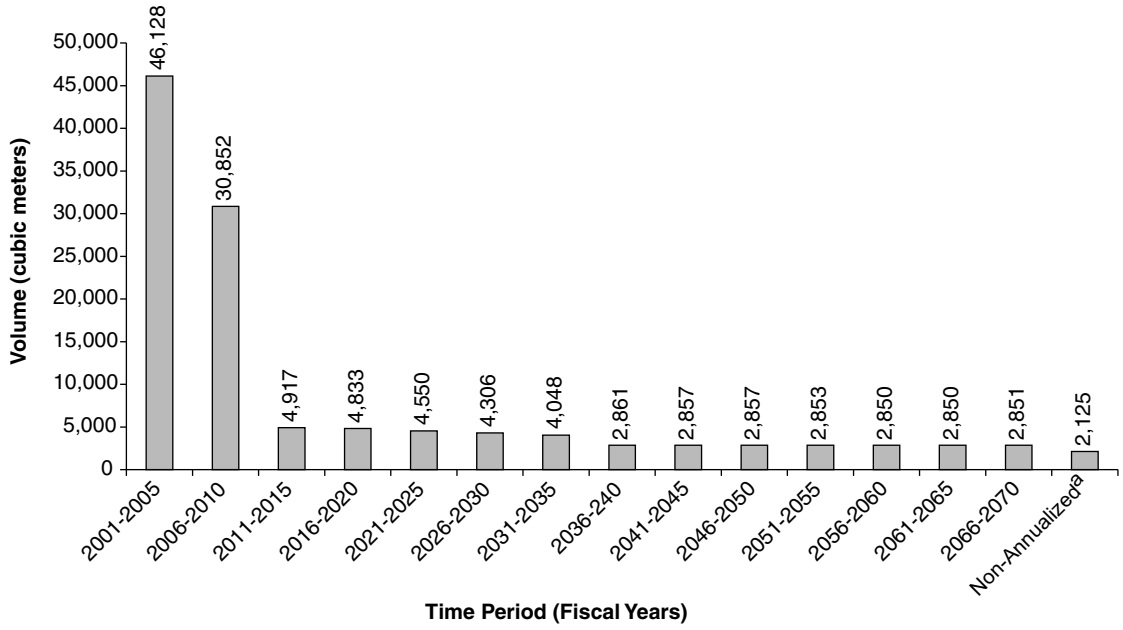


Figure 8-16
Total Projected Volume of MLLW Receipts
as Reported by Sites: FY 2001 - FY 2070
(Includes all physical forms except waste water)



Note:
[a] Non-annualized refers to those volumes of MLLW for which the DOE could not specify the year in which the receipt would occur.

8.6 MLLW Disposal as Reported by Sites

Disposal is defined as a management activity where the waste is emplaced in a manner that ensures protection of human health and the environment within prescribed limits for the foreseeable future.

This chapter provides the reported actual (FY 1998 and FY 1999) and projected (FY 2000 - FY 2070) MLLW on-site disposal volumes for both DOE and commercial (non-DOE) disposal sites.

There are no reported waste water volumes associated with on-site disposal of MLLW.

8.6.1 MLLW Disposal Data by Site and State

Table 8-22 provides data on MLLW-radioactive waste and the combined MLLW-radioactive waste and MLLW-contaminated media disposal volumes for FY 1998 and FY 1999. In both fiscal years, contaminated media accounted for a small percentage of the disposed-of MLLW. More detailed information on MLLW-contaminated media is provided in Figure 8-17 below and in Chapter 10.

Figure 8-18 represents sites' relative contributions to the total volume of MLLW-radioactive waste and MLLW-contaminated media disposed of during FY 1999.

Table 8-22
Total Volume of MLLW- Radioactive Waste (RW) and MLLW-Contaminated Media (CM) Disposal as Reported by Sites: FY 1998 and FY 1999 Actuals
(Includes all physical forms except waste water)

In cubic meters

State	Site	Site Code	FY 1998 RW	% 1998 RW Total	FY 1999 RW	% 1999 RW Total	FY 1998 RW+CM	% 1998 RW+CM Total	FY 1999 RW+CM	% 1999 RW+CM Total
NV	Nevada Test Site	NVTS	-	-	13	<1	-	-	13	<1
UT	Envirocare	ENVR	3,712	100	16,216	98.8	3,792	99.4	16,370	98.7
WA	Hanford Site	HASI	-	-	182	1.1	22	<1	200	1.2
	Total		**3,712**	**100**	**16,410**	**100**	**3,814**	**100**	**16,583**	**100**

Notes:
• Hyphens indicate volumes of zero.
• Due to data rounding, the totals in this table may not equal the sum of the site-specific data.
• Data in this table show on-site disposal volumes for both DOE and non-DOE sites.

Figure 8-17
Comparison of MLLW-Radioactive Waste and MLLW-Contaminated Media Total Disposal Volumes: FY 1998 and FY 1999 Actuals

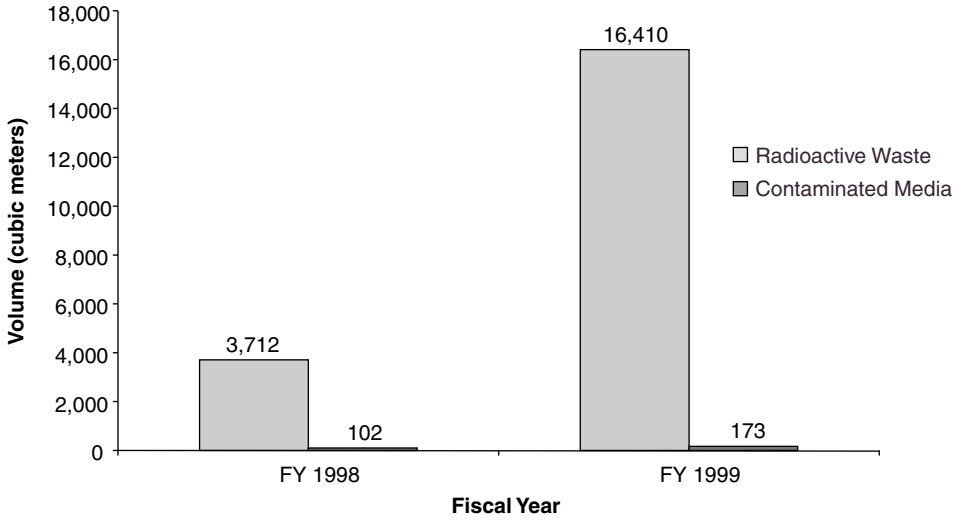
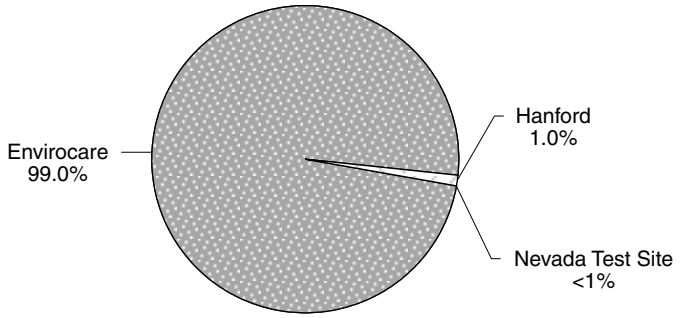


Figure 8-18
Sites' Relative Contributions to the Disposal Volumes of MLLW
(Radioactive Waste and Contaminated Media)
as Reported by Sites: FY 1999 Actuals



Notes:
• The total reported volume (excluding waste water) of MLLW (radioactive waste and contaminated media) disposed of in FY 1999 was approximately 16,583 cubic meters. See Table 8-22 for further details.
• The total reported disposal volume (excluding waste water) in FY 1998 was approximately 3,814 cubic meters. Envirocare and Hanford's contributions to the volume of MLLW disposal in FY 1998 were 99.4% and <1%, respectively.
• Percentages may not add to exactly 100% due to rounding.

MLLW Disposal Site Projection Data:

Table 8-23 provides the projected (FY 2000 - FY 2070) MLLW disposal volumes. Figure 8-19 shows MLLW annual disposal volumes by site for FY 2000 through FY 2010, and Figure 8-20 presents the DOE-wide projection totals for five-year time periods through FY 2070. The total projected disposal volume of MLLW-CM (contaminated media) is not included in any of the following tables or figures because these data are particularly subject to change. However, the total amount of MLLW-CM currently expected to be disposed of in the future (FY 2000 - FY 2070) is approximately 272,000 cubic meters.[8]

[8] Of the 272,000 cubic meters of MLLW-contaminated media, over 99 percent are expected to be disposed of at the Oak Ridge Reservation (~198,000), INEEL (~37,000), and Envirocare (~37,000).

Table 8-23
Total Projected Volume of MLLW Disposal as Reported by Sites:
FY 2000 - FY 2070

In cubic meters

State	Site	Site Code	FY 2000[a]	FY 2001-2005	FY 2006-2010	FY 2011-2015	FY 2016-2020	FY 2021-2025
NV	Nevada Test Site	NVTS	20	-	-	-	-	-
SC	Savannah River Site	SARS	-	-	-	8	-	-
UT	Envirocare	ENVR	8,985	22,893	24,084	180	180	180
WA	Hanford Site	HASI	835	7,816	8,420	8,963	14,155	12,797
n/a	To Be Determined[b]	n/a	1,390	16,817	4,660	3,266	3,226	3,227
	Total		**11,230**	**47,525**	**37,163**	**12,417**	**17,560**	**16,204**

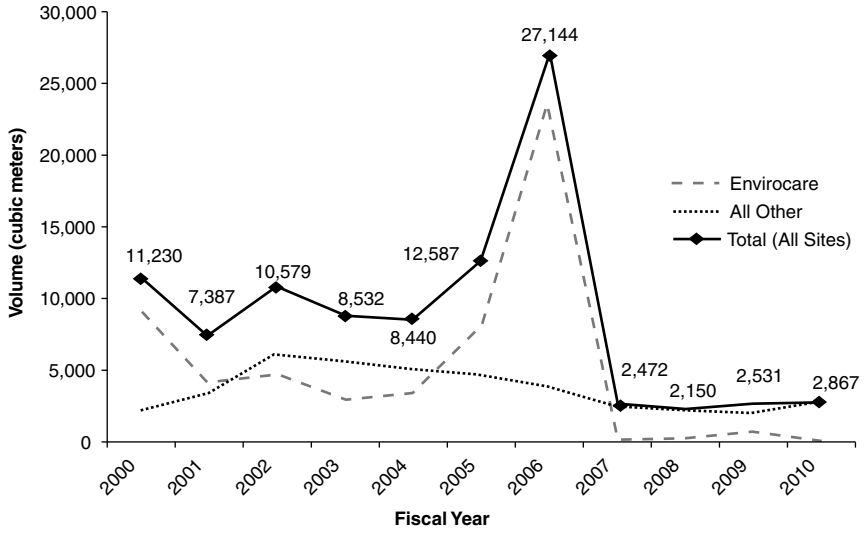
State	Site	Site Code	FY 2026-2030	FY 2031-2035	FY 2036-2040	FY 2041-2045	FY 2046-2050	FY 2051-2055
NV	Nevada Test Site	NVTS	-	-	-	-	-	-
SC	Savannah River Site	SARS	-	-	-	-	-	-
UT	Envirocare	ENVR	135	135	135	135	135	135
WA	Hanford Site	HASI	8,403	1,076	67	55	11	-
n/a	To Be Determined[b]	n/a	3,128	3,127	2,666	2,661	2,662	2,661
	Total		**11,666**	**4,338**	**2,868**	**2,851**	**2,808**	**2,796**

State	Site	Site Code	FY 2056-2060	FY 2061-2065	FY 2066-2070	Non-Annualized[c]	Site Total	% Total
NV	Nevada Test Site	NVTS	-	-	-	-	**20**	<1
SC	Savannah River Site	SARS	-	-	-	-	**8**	**<1**
UT	Envirocare	ENVR	135	135	135	-	**57,713**	**32.1**
WA	Hanford Site	HASI	-	-	-	-	**62,598**	**34.8**
n/a	To Be Determined[b]	n/a	2,659	2,659	2,659	2,123	**59,590**	**33.1**
	Total		**2,793**	**2,793**	**2,794**	**2,123**	**179,929**	**100**

Notes:
• Hyphens indicate volumes of zero.
• Due to data rounding, the totals in this table may not equal the exact sum of the site-specific data.
• The data in this table show on-site disposal volumes for both DOE and non-DOE sites.
• Data on MLLW-contaminated media are not included in this table. The total projected (FY 2000 - FY 2070) disposal volume of MLLW-contaminated media is approximately 272,000 cubic meters.

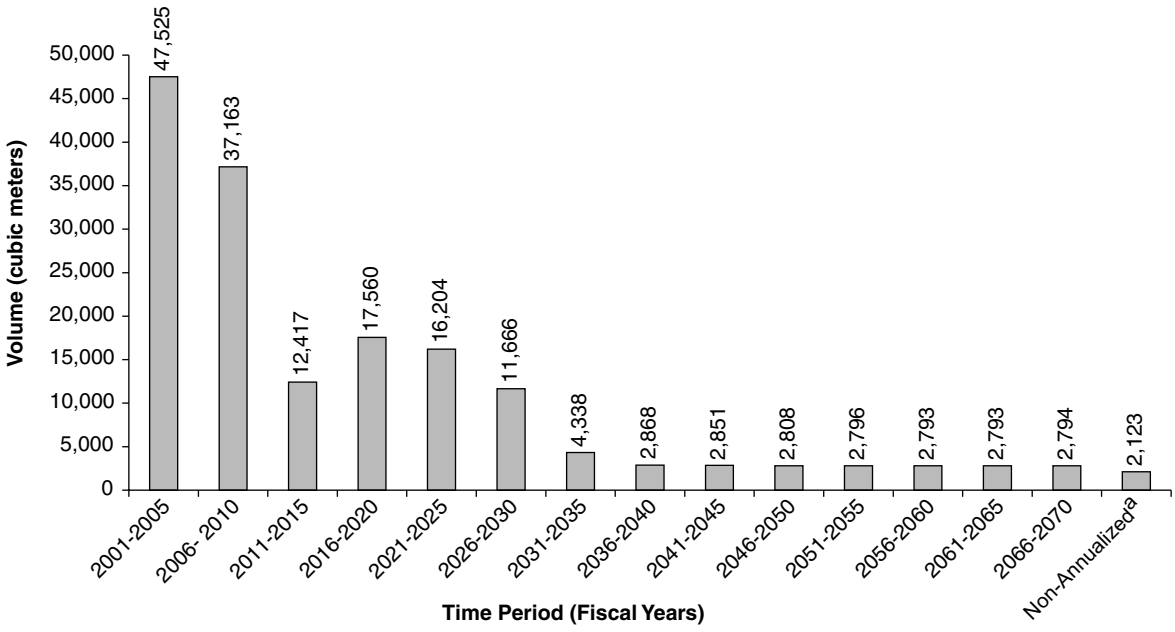
[a] These annual data reflect the total volume projected by sites for FY 2000. All post-FY 2000 data reflect the total summary volume projected for the specific five-year time periods.
[b] Includes to be determined DOE and commercial sites.
[c] Non-annualized refers to those volumes of MLLW for which the DOE reporting sites could not specify the year in which the on-site disposal would occur.

Figure 8-19
Total Projected Volume of MLLW Disposal as Reported by Sites: FY 2000 - FY 2010



Note:
• Data on MLLW-contaminated media are not included in this figure. The projected MLLW-contaminated media disposal volume from FY 2000 through FY 2010 is approximately 271,000 cubic meters.

Figure 8-20
Total Projected Volume of MLLW Disposal as Reported by Sites: FY 2001 - FY 2070



Notes:
• Data on MLLW-contaminated media are not included in this figure. The projected MLLW-contaminated media disposal volume from FY 2001 through FY 2070 is approximately 272,000 cubic meters.
[a] Non-annualized refers to those volumes of MLLW for which the DOE could not specify the year in which the receipt would occur.

8.7 MLLW Waste Water Summary

This section provides information on MLLW waste water volumes as reported by sites. All MLLW volumes previously shown in this chapter have excluded the volume of waste water because, when all physical forms are viewed simultaneously, the dominance of waste water overshadows the importance of the other physical forms that comprise MLLW. Excluding waste water allows more direct interpretation.

The physical forms that comprise MLLW- radioactive waste range from aqueous liquids/slurries to waste water to vitrified forms. When all physical forms are considered simultaneously, the primary physical form of MLLW (with the exception of the MLLW in inventory) is waste water. As shown in Table 8-24, the volumes of waste water dominate MLLW-new generation and treatment, but contribute little to the total reported inventory and not at all to receipts or disposal. Waste water comprised approximately 90 percent of the MLLW newly-generated in both fiscal years 1998 and 1999. Waste water also accounted for the majority of the MLLW treated in both fiscal years (approximately 92 percent in FY 1998 and approximately 95 percent in FY 1999).

Table 8-24
Contribution of Waste Water to Total Volume of MLLW:
FY 1998 and FY 1999 Actuals

In cubic meters

	Physical Form	FY 1998	%1998 Total	FY 1999	% 1999 Total
Inventory	Waste Water	94	<1	29	<1
	All Other Physical Forms (Excluding Waste Water)	66,480	99.9	44,455	99.9
	Total (All Physical Forms)	**66,574**	**100**	**44,484**	**100**

	Physical Form	FY 1998	%1998 Total	FY 1999	% 1999 Total
New Generation	Waste Water	23,796	89.0	25,701	89.6
	All Other Physical Forms (Excluding Waste Water)	2,954	11.0	2,968	10.4
	Total (All Physical Forms)	**26,750**	**100**	**28,669**	**100**

	Physical Form	FY 1998	%1998 Total	FY 1999	% 1999 Total
Treatment	Waste Water	69,245	91.9	71,192	94.5
	All Other Physical Forms (Excluding Waste Water)	6,112	8.1	4,160	5.5
	Total (All Physical Forms)	**75,357**	**100**	**75,352**	**100**

	Physical Form	FY 1998	%1998 Total	FY 1999	% 1999 Total
Receipts	Waste Water	-	-	0.8	<1
	All Other Physical Forms (Excluding Waste Water)	3,885	100	16,576	100
	Total (All Physical Forms)	**3,885**	**100**	**16,576**	**100**

	Physical Form	FY 1998	%1998 Total	FY 1999	% 1999 Total
Disposal	Waste Water	-	-	-	-
	All Other Physical Forms (Excluding Waste Water)	3,712	100	16,410	100
	Total (All Physical Forms)	**3,712**	**100**	**16,410**	**100**

Notes:
• Hyphens indicate volumes of zero.
• Due to data rounding, the totals in this table may not equal the exact sum of the form-specific data.
• Totals do not include contaminated media volumes. See Chapter 10 for more information about MLLW-contaminated media.